

**REMARKS**

Claims 18-20 are pending in this application. Claims 1-17 and 21-26 are cancelled. No new matter has been introduced. Applicants submit that this Response places this case in condition for immediate allowance. Entry is respectfully requested.

**Rejections under 35 U.S.C. § 103**

A. Claims 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yokouchi et al. (JPA 9-169989) in view of Heimann et al. (U.S. Patent 6,010,984).

Although Yokouchi differs from the instant claims in not teaching the addition of a pH adjustor to the grease composition, the Examiner considered that the prior art does teach the addition of amine compounds which act as pH adjustors in Applicants' claimed invention. The Office Action assumes that the amine compounds of Yokouchi, although taught as antioxidants, must also function as pH adjustors. The Office Action concedes that pH is not a usual measurement in grease compositions, so it is "not surprising that Yokouchi does not disclose the pH of the greases." Nonetheless, the Office Action alleges that the grease compositions disclosed in Yokouchi may also have a pH within the claimed range since the components of the grease, and the amounts of those components, may be the same as those claimed.

Heimann was cited as teaching that grease compositions may be tailored to be compatible with specific metal surfaces with which greases come into contact. According to the Examiner, it would have been obvious to adjust the pH of the grease composition to tailor the grease to be compatible with the metal surface with which it is in contact, with a reasonable expectation of enhancing corrosion resistance.

The reason for the rejection was that a person of ordinary skill in the art would have found it obvious to add a pH adjustor, as disclosed in Heimann, to the grease composition of Yokouchi, in order to adjust the pH to within a range of 5 to 6 as claimed.

**B.** Claims 18-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Naka et al. (U.S. Patent 5,728,659) in view of Heimann et al. (U.S. Patent 6,010,984) and Yokouchi et al. (JPA 9-169989).

Heimann et al. and Yokouchi et al. were cited for disclosing the features as described above. Further, Naka et al. was cited as disclosing, *inter alia*, amine compounds and metal soaps which allegedly are also said to function as pH adjustors. Hence, a further reason for rejection was that it would have been obvious to add a pH adjustor as taught by Heimann to the grease composition of Naka in order to adjust the pH to within a range of 5 to 6 in order to tailor the grease so that it is compatible with the metal surface and to enhance corrosion resistance; and ii) it would have been obvious to add inorganic filler, as taught by Yokouchi, in order to reinforce the gel structure and film-forming properties of the grease composition.

Applicants respectfully traverse the foregoing rejections.

Claims 18, 19 and 20 include a pH adjuster that adjusts pH to within a range of "5-6." This is a preferred range of the present invention, as shown, for example, by reference to bearing nos. 21-26 of Table 3 at page 63 of the specification. See also bearing nos. 11-17 in Table 2 at page 58 of the specification.

The Office Action concedes that pH is not a usual measurement in grease compositions. In this regard, Applicants have discovered that, *inter alia*, by controlling pH, an oily film can be formed on the rolling surface and the raceway surface, thereby reducing tangential forces and

reducing the formation of small crevices between non-metallic inclusions and the metal matrix of the bearing material. See page 13, line 16-25.

In contrast, as asserted by the Examiner, Heimann et al's pH is adjusted to within the range of from about 7-14. Moreover, Yokouchi et al is silent with respect to the pH of the grease, and Yokouchi et al's grease containing the additive in an amount of from 0.5 to 10% is disclosed as being sealed in the rolling bearing. Thus, no combination of Yokouchi et al and Heimann et al would have rendered obvious the features of instant claims 18-20. For this reason alone, it is respectfully submitted that the present claims are patentable over the cited prior art.

Further, the combination of Heimann et al and Yokouchi et al in no manner leads one skilled in the art to employ a pH adjustor in the grease composition of a rolling bearing, let alone a pH adjuster for adjusting the pH to from 5-6. Specifically, because the prior art instructs setting pH within a range of 7-14, there is no apparent reason which would lead one of ordinary skill to lower that pH *with a reasonable expectation of success*. Naka et al nowhere remedies the deficiencies of either Yokouchi et al or Heimann et al in this regard. Naka et al is silent regarding pH, and Naka et al's diurea compound is used as a thickening agent.

Hence, no combination of Heimann et al, Yokouchi et al and Naka et al would have rendered obvious the features as claimed, nor the specific benefits flowing therefrom.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The U.S. Patent and Trademark Office is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

  
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